AVE_June2005 Flight Summary 21 June 2005

General Information

Flight date - 21 June 2005

Flight description - Flight 7 AVE mission

Flight duration – 4.3 hours

Crew – William Ehrenstrom, John Bain (281-244-9661)

Instruments flown (18): ACAM, Argus, CAFS, CPL, CIMS, FCAS/NMASS/MACS, Harvard Water Vapor, JLH, IRIS, MMS, MTP, Ozone, PANTHER, PT, S-HIS, WAS

Flight Log

| MMS ON | 2:30 | Takeoff | 2:49 | Begin Descent | 6:17 |
|-------------|------|------------|------|---------------|------|
| Before Taxi | 2:42 | Climb/5000 | 2:51 | Landing | 6:59 |

Gear extension/retractions

| Gear Up | 2:49 | | | |
|-----------|------|--|--|--|
| Gear Down | 5:52 | | | |

Weather Observations

Climb:

It was clear but hazy on climb-out.

Cruise:

- The sky was clear, with a widely scattered cumulus layer near the ground below us.
- Generally, over the water it was clear to the ground with scattered clouds, while over land it was very hazy with scattered clouds.
- On the southbound leg at 43 kft, we passed under a very thin cloud at 5:38 pm for about 10 minutes.

Descent:

There were no clouds, but it was very hazy on descent.

Flight Profile

We flew the planned profile with the following exceptions:

- The descent to the southernmost point was to 42 kft due to air traffic control.
- We stopped climbing in the first spiral ascent at 54 kft due to a very slow climb performance in the turn.
- On the southbound leg, from waypoint 7 at 95 nm to waypoint 9, we had to climb from 41 kft to 43 kft due to traffic.
- We ended the final spiral climb at waypoint 9 at 54 kft, and then climbed on the way home to 59 kft.

Instrument Notes

- The CAFS upper fail light did not go off initially. I cycled it at 3:10 pm and it stayed out for the rest of the flight.
- The S-HIS fail light came on during the first descent to the southernmost point. I cycled the switch, and the fail light stayed out. During the southbound leg to waypoint 9, we encountered increasing clear air turbulence and the fail light came on at 5:55 pm (about four minutes before reaching waypoint 9). I cycled the switch after we were in the climb and out of the turbulence at 6:01 pm, and the fail light stayed out. It came on again at 6:23 pm in the final descent with spoilers out.
- The Harvard water vapor light came on at 9,000 feet during descent, as expected. No action was taken.
- The CIMS fail light came on at about 2,300 feet during descent, as expected. No action was taken.

To ftp for the nav data:

IP address 128.157.138.64

Username: anonymous@wb57f.asds.net

Password: <any email address>

The directory is: WB57F_Processed/AVEJUN05